

Claims

1. A method for forming a film-like optical coating creating an interference phenomenon on the surface of an object, **characterised in that**

- on a given first spot on the object surface, there is formed a film-like optical coating, which creates a given first interference effect at a given wavelength of visible light,

- on a given second spot of said surface, there is created a given second interference effect at said wavelength of visible light, said second interference effect being different from said first interference effect.

2. A method according to claim 1, **characterised in that** on a second spot of said object, there is formed an uncoated area, the interference effect whereof is the reflecting of visible light from said uncoated surface.

3. A method according to claim 1, **characterised in that** on a second spot of said object, there is formed a film-like optical coating with a given second interference effect at a given wavelength of visible light.

4. A method according to claim 1, **characterised in that** in order to make the coatings, on the surface of the object to be coated there is essentially employed a CVD (Chemical Vapour Deposition) process.

5. A method according to claim 1, **characterised in that** in order to produce the coatings, on the surface of the object to be coated, there is essentially employed a PVD (Physical Vapour Deposition) process.

6. A method according to claim 1, **characterised in that** in order to produce the coatings, on the surface of the object to be coated, there is employed sputtering.

7. A method according to claim 1, **characterised in that** the coating is tinted by means of a colouring agent in order to achieve a given nuance on the surface of the object to be coated.

8. A method according to claim 1, **characterised in that** in order to focus the coating on the surface of the object to be coated there are created areas with different electrical charges.

9. A method according to claim 1, **characterised in** that in order to focus the coating on the surface of the object to be coated there are created areas with different magnetic properties.

5 10. A method according to claim 1, **characterised in** that in order to produce a given coating pattern on the surface of the object to be coated, some of the coating is removed by using an ion beam.

10 11. A method according to claim 1, **characterised in** that it includes a step for marking the object with an identifier.

12. A method according to claim 11, **characterised in** that said identifier is a trade mark identifier.

15 13. A method according to claim 11, **characterised in** that said identifier includes a symbol of a lawful manufacturer of the object.

14. A method according to claim 11, **characterised in** that it includes steps for marking the identifier as both visible and invisible for the naked eye.

20 15. A method according to claim 14, **characterised in** that in the step for marking the identifier as invisible for the naked eye, said identifier is realised as a sufficiently small identifier.

25 16. A method according to claim 14, **characterised in** that in the step for marking the identifier as invisible for the naked eye, said identifier is realised so that it can be detected on the basis of a given photon radiation.

30 17. An object coated with a film-like optical coating, **characterised in** that it comprises

- on a given first spot on the object surface a film-like optical coating, which is arranged to create a given first interference effect at a given wavelength of visible light,
 - on a given second spot on the object surface, which is arranged to create a given
- 35 second interference effect at said wavelength of visible light, said second interference effect being different from said first interference effect.

18. An object according to claim 17, **characterised** in that a second spot on the object surface is uncoated, in which case its interference effect is the reflecting of visible light from the uncoated surface.

5 19. An object according to claim 17, **characterised** in that it comprises, on a second spot on the object surface, a film-like optical coating, which creates a given second interference effect at a given wavelength of visible light.

10 20. An object according to claim 17, **characterised** in that it comprises at least two coating layers on at least one spot.

21. An object according to claim 17, **characterised** in that it is a display or part thereof.

15 22. An object according to claim 17, **characterised** in that it is a mobile telecommunication device or part thereof.

23. An object according to claim 17, **characterised** in that the coatings are metal compounds, such as MgF_2 .

20 24. An object according to claim 17, **characterised** in that the coatings are non-metallic compounds, such as SiO_2 .

25 25. An object according to claim 17, **characterised** in that it comprises coating layers in order to create a hologram.

26. An object according to claim 17, **characterised** in that it comprises coating areas in order to create alphabetic characters.

30 27. An object according to claim 17, **characterised** in that it comprises coating areas in order to create graphic symbols.

28. An object according to claim 27, **characterised** in that in a coating area thereof, the graphic symbols form the symbol of the object's manufacturer.

35 29. An object according to claim 27, **characterised** in that in a coating area thereof, certain graphic symbols form a part of the trade mark symbol of the object's manufacturer.

30. An object according to claim 17, **characterised** in that the coating thicknesses are within the range of 0.03 μm -30 μm .

5 31. An object according to claim 17, **characterised** in that it is a product package.

32. An object according to claim 17, **characterised** in that it is a protective shell of a product.

10 33. An object according to claim 17, **characterised** in that it is part of a product.

34. An object according to claim 17, **characterised** in that it is part of another product designed to be used in connection with the first product.

15 35. An object according to claim 17, **characterised** in that it is a guide for instructing how to use the product.

36. An object according to claim 17, **characterised** in that it is a certificate of guarantee of the product.

20 37. An object according to claim 17, **characterised** in that it is a separate certificate indicating the authenticity of the product.

25 38. An object according to claim 17, **characterised** in that the identifier is self-luminous.

39. An object according to claim 38, **characterised** in that in the film-like structure thereof, there is included material that causes phosphorescence in order to achieve self-luminosity.

30 40. An object according to claim 38, **characterised** in that in the film-like structure thereof, there is included material that causes fluorescence in order to achieve self-luminosity.